

## Federal Communications Commission Washington, DC 20554

October 20, 2005

## VIA EMAIL

William T. Lake Wilmer Cutler Pickering Hale and Dorr LLP 2445 M Street NW Washington, DC 20037

Re: Iridium Special Temporary Authority, IBFS File Nos. SAT-STA-20050923-00180 and SAT-STA-20050923-00181

Dear Mr. Lake,

This letter is in regard to your letter to Marlene H. Dortch, Secretary, Federal Communications Commission, dated October 17, 2005, requesting the Commission to immediately terminate the special temporary authority granted Iridium in response to their applications with IBFS File Numbers SAT-STA-20050923-00180 and SAT-STA-20050923-00181. We have some questions for Globalstar, as listed below:

- 1. Has Globalstar contacted Iridium to discuss this interference issue, as is current industry practice? If so, when did Globalstar first contact Iridium concerning this interference issue?
- 2. Is Globalstar currently in communication with Iridium about this interference issue?
- 3. What discussions has Globalstar had with Iridium regarding this interference issue? What steps, if any, have been taken by either party to mitigate the interference?
- 4. What has Globalstar done to rule out the possibility that the return link degradation it is seeing is not due to new handsets introduced into the disaster area, or attempts by users to use its handsets in unsuitable locations (e.g. inside sheltered areas), or some other degradation in its system?
- 5. What complaints has Globalstar received from its customers regarding service degradation in the disaster area, and in the region as a whole?
- 6. Has any performance degradation been experienced at Globalstar gateways other than the Clifton, TX gateway?
- 7. Has Globalstar performed link performance measurements similar to those described in its Technical Exhibit for any days other than August 4 and September 22? If so, can Globalstar provide the measured data to the Commission?
- 8. Has Globalstar performed any laboratory measurements to assess return link degradation in the presence of interference from Iridium-like signals in controlled conditions similar to actual operations as seen at the Clifton, TX gateway? If so, what are the results?
- 9. The Iridium STA permits Iridium to operate in the 1616.0-1618.25 MHz frequency band, which corresponds to part of Globalstar's channel 5, all of Globalstar's channel 6, and

- part of Globalstar's channel 7. Globalstar has indicated that it is receiving harmful interference to its channels 7 and 8, with no discussion of channels 5 and 6. We note that the subject Iridium STA does not appear to affect channel 8.
- 10. In the second paragraph on page 1 of the Technical Exhibit, there appear to be some discrepancies in the frequencies and channel numbers listed by Globalstar. For example, we understand the band segment 1616.265-1622.415 MHz corresponds to channels 6-10, while Globalstar states that 1616.265-1621.415 MHz corresponds to channels 5-9. Please clarify this paragraph if necessary.
- 11. On page 2 of its Technical Exhibit, Globalstar discusses small percentage changes in average frame error rates (FER) between 8/4/05 and 9/22/05. Has Globalstar performed an analysis to determine whether these small percentages are statistically significant?
- 12. Can Globalstar explain why the relatively small increases in average frame error rates translate into a relatively large increases in radio link failure rates?
- 13. On page 4 of its Technical Exhibit, Globalstar shows a 14% radio link failure rate for channel 3 on 9/22/05, which is higher than the radio link failure rates for channels 7 and 8 on 8/4/2005. Does Globalstar have an explanation for this? We note that Iridium does not operate on frequencies corresponding to channel 3.
- 14. Figure 1 (Figure 6?) on page 5 of Globalstar's Technical Exhibit appears to show a number of Iridium carriers in Globalstar's channel 6 that is comparable to the number of Iridium carriers in Globalstar's channels 7 and 8. Has Globalstar experienced the same degradation in performance in channel 6 as it has in channels 7 and 8?
- 15. We note that there was a problem with interference from the Johnson Space Center into Globalstar's forward links in the 2483.5-2500 MHz band prior to Hurricanes Katrina and Rita. Has the possibility that this interference was responsible for some or all of the link failures on September 22 been ruled out? Please explain.

We request your response by close-of-business on Friday, October 21, 2005. Please direct your response via email to me at <a href="mailto:Robert.Nelson@fcc.gov">Robert.Nelson@fcc.gov</a>, with a copy to Chip Fleming@fcc.gov.

Sincerely,

Robert G. Nelson

Chief

Satellite Engineering Branch

cc: R. Michael Senkowski

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